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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,639	09/25/2003	Hiroshi Kanno	50024-020	4470
20277 7590 01/03/2007 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			EXAMINER PATEL, ASHOK	
			ART UNIT	PAPER NUMBER
			2879	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/03/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/669,639

Applicant(s)

KANNO ET AL.

Examiner

Ashok Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4 pages</u> .   | 6) <input type="checkbox"/> Other: ____                           |

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1. The following is a quotation of the first paragraph of 35

U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The first carrier transporting layer (28) and light emitting layer (22) are disclosed as continuous layer in the specification and claims. However, as evidenced by the drawings, these two layers are not continuous in nature. These two layers are non-planar shaped discrete layers, which are non-continuous in nature. The term "continuous layer" would refer to one whole entire layer including no discrete elements within itself. The disclosed and claimed layers (22 and 28) include plural discrete or non-continuous elements.

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Yokoyama (USPN 6995517).

Yokoyama discloses applicant claimed organic EL (electroluminescent) display apparatus (Figures 2-8) including: a plurality of organic electroluminescent devices constituting a plurality of pixels of different colors (R, G, B),

wherein organic electroluminescent device includes a first electrode (56), a light emitting layer (62), a first carrier transporting layer (63) and a second electrode (64) in this order, and

the light emitting layer (62) and the first carrier transporting layer (63) are formed to be continuous layers, respectively, in at least two of the adjacent organic electroluminescent devices constituting pixels of the same color.

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Note that the Examiner interprets the layers 62 and 63 as continuous layer, similar to applicant's disclosed layers 28 and 22 (in applicant's drawing Figure 3).

As to claim 2, Yokoyama discloses (in Figures 2-8) the plurality of pixels arranged in the form of a matrix such that the pixels of the same color are arranged along the column direction (top to bottom direction of the page) and the pixels of different colors are periodically arranged along the row direction (left to right direction of the page), and the light emitting layers and the first carrier transporting layers of at least two organic electroluminescent devices in each column are formed to be striped layers, respectively.

As to claim 3, Yokoyama discloses (in Figures 2-8) each organic electroluminescent device further including a second carrier transporting layer (61) between the first electrode (56) and the light emitting layer (62), each of said first electrodes of the organic electroluminescent devices constituting respective pixels formed independently, and the second carrier transporting layers in a plurality of organic electroluminescent devices constituting at least two pixels formed to be a continuous layer.

As to claim 4, Yokoyama discloses an area (partition 68) separating adjacent pixels along the row direction, and an

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interface between the light emitting layers and an interface between the first carrier transporting layers of adjacent organic EL devices in the row direction located on the area.

As to claims 7-10, since Yokoyama's disclosed device include all elements features as that of claimed by applicant's claimed device, Yokoyama's disclosed device is considered as formed by the method as recited in applicant's method claims. The artisan seeking the apparatus claim would necessarily perform the method as claimed.

5. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Fukuda (USPN 6541130, of record).

Fukuda discloses applicant's claimed organic EL (electroluminescent) display apparatus (Figures 1-7, 20, 21) including: a plurality of organic electroluminescent devices constituting a plurality of pixels of different colors (R, G, B),

wherein organic electroluminescent device includes a first electrode (3), a light emitting layer (43), a first carrier transporting layer (42) and a second electrode (5) in this order as shown for example in Figure 6), and

the light emitting layer (43) and the first carrier transporting layer (42) are formed to be continuous layers,

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respectively, in at least two of the adjacent organic electroluminescent devices constituting pixels of the same color.

Note that the Examiner interprets the layers 43 and 42 as continuous layers, similar to applicant's disclosed layers 28 and 22 (in any of drawing Figures 1-7, 20 and 21).

As to claim 2, Fukuda discloses the plurality of pixels arranged in the form of a matrix such that the pixels of the same color are arranged along the column direction (top to bottom direction of the page) and the pixels of different colors are periodically arranged along the row direction (left to right direction of the page), and the light emitting layers and the first carrier transporting layers of at least two organic electroluminescent devices in each column are formed to be striped layers, respectively.

As to claim 3, Fukuda discloses (in any one of Figures 1-7 each organic electroluminescent device further including a second carrier transporting layer (44) between the first electrode (5) and the light emitting layer (43), each of the first electrodes of the organic electroluminescent devices constituting respective pixels formed independently, and the second carrier transporting layers in a plurality of organic electroluminescent devices constituting at least two pixels formed to be a continuous layer.

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As to claim 4, Fukuda discloses an area (space) separating adjacent pixels along the row direction, and an interface between the light emitting layers and an interface between the first carrier transporting layers of adjacent organic EL devices in the row direction located on the area.

As to claim 5, Fukuda discloses the light emitting layers and the first carrier transporting layer constituting pixels of at least two colors containing the same organic material (paragraph bridging columns 6 and 7).

As to claim 6, Fukuda discloses the light emitting layers and the first carrier transporting layer having different thicknesses (see Figure 21).

As to claims 7-12, limitations of these claims are parallel to that of claims 1-6. Further, since Fukuda's disclosed device include all elements features as that of claimed by applicant's claimed device, Fukuda's disclosed device is considered as formed by the method as recited in applicant's method claims 7-12. The artisan seeking the apparatus claim would necessarily perform the method as claimed.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 5, 6, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoyama (as applied to claims 1 and 7.

As to claim 5, Yokoyama does not appear to disclose the light emitting layers and the first carrier transporting layer constituting pixels of at least two colors containing the same organic material. However, providing the light emitting layers and the first carrier transporting layer of same or different organic material would have been a matter of obvious design choice to one of ordinary skill in the art since materials of these layers are known in the art for their suitability.

It is to be noted that applicant's claimed same material for the light emitting layers and the first carrier transporting layer does not solve any particular problem that is not solved by prior art materials of the light emitting layers and the first carrier transporting layer.

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In light of this, applicant's claimed same material for the light emitting layers and the first carrier transporting layer would have been a matter of obvious design choice to one of ordinary skill in the art.

As to claim 6, Yokoyama does not disclose the light emitting layers and the first carrier transporting layer having different thicknesses. However, since applicant's claimed different thicknesses of the light emitting layers and the first carrier transporting layer do not solve any particular problem that is not solved by configurations of the light emitting layers and the first carrier transporting layer.

In light of this, applicant's claimed different thicknesses of the light emitting layers and the first carrier transporting layer having different thicknesses would have been a matter of obvious design choice to one of ordinary skill in the art.

As to claims 11 and 12, since Yokoyama's disclosed device include all elements features as that of claimed by applicant's claimed device, Yokoyama's disclosed device is considered as formed by the method as recited in applicant's method claims. The artisan seeking the apparatus claim would necessarily perform the method as claimed.

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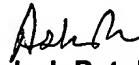
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamada et al and Sakurai each are cited for showing general structure of an organic EL device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashok Patel whose telephone number is 571-272-2456. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ashok Patel**  
**Primary Examiner**  
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